CLAIMS

What is claimed is:

1   1.   A method for previewing an electronic document, the method comprising:

2   generating the electronic document at a client;

3   transmitting document information associated with the electronic document

4   from the client to a printing device;

5   generating preview document data at the printing device based on the

6   document information and a set of one or more specific

7   characteristics associated with the printing device, wherein the set of

8   one or more specific characteristics are unavailable at the client;

9   transmitting the preview document data to the client from the printing

10   device; and

11   previewing the electronic document at the client based on the preview

12   document data received from the printing device.

1   2.   The method as recited in Claim 1, wherein:

2   the printing device is a multi-functional printer (MFP); and

3   the step of transmitting document information includes transmitting

4   document information to the MFP.

1   3.   The method as recited in Claim 1, wherein:

2   the document information is Page Description Language (PDL) data; and

3   the step of transmitting document information includes transmitting PDL

4   data from the client to the printing device.

1   4.   The method as recited in claim 1, wherein the step of generating preview

2   document data at the printing device includes generating raster image data at

3   the printing device based upon the document information and the set of one

4   or more specific characteristics associated with the printing device.

1   5.   The method as recited in claim 1, wherein the step of generating preview

2   document data at the printing device includes generating a bitmap image at

3   the printing device based upon the document information and the set of one

4   or more specific characteristics associated with the printing device.

1   6.   The method as recited in Claim 1, wherein

2   the printing device is associated with one or more different paper

3   characteristics that are available for printing electronic documents;

4   and

5   the set of one or more specific characteristics associated with the printing

6   device includes one or more of the one or more different paper

7   characteristics that are available for printing electronic documents.

1   7.   The method as recited in Claim 6, wherein the one or more different paper

2   characteristics includes one or more paper type characteristics, wherein the

3   one or more paper type characteristics indicate a specific type of paper that

4   has been for printing the electronic document.

1   8.   The method as recited in Claim 6, wherein the one or more different paper

2   characteristics includes one or more paper color characteristics, wherein the

3   one or more paper color characteristics indicate a specific color of paper that

4   has been for printing the electronic document.

1 9. The method as recited in Claim 1, wherein

2   the printing device supports one or more different fonts that are available for

3   printing electronic documents; and

4   the set of one or more specific characteristics associated with the printing

5   device includes one or more of the one or more different fonts that are

6   available for printing electronic documents.

1 10. The method as recited in Claim 1, wherein

2   the printing device is associated with one or more different stapling

3   characteristics that are available for selection; and

4   the set of one or more specific characteristics associated with the printing

5   device includes one or more of the one or more different stapling

6   characteristics that are available for selection.

1 11. The method as recited in Claim 1, wherein

2   the printing device is associated with one or more different finishing

3   characteristics that are available for selection; and

4   the set of one or more specific characteristics associated with the printing

5   device includes one or more of the one or more different finishing

6   characteristics that are available for selection.

1 12. The method as recited in Claim 1, wherein

2 the client includes a print driver that is associated with the printing device;

3   and

4 the set of one or more specific characteristics that are unavailable at the client

5   includes one or more characteristics that are unknown to the print

6   driver.

1 13. The method as recited in Claim 1, wherein

2 the client includes a print driver that is associated with the printing device,

3   wherein the print driver is associated with one or more print driver

4   attributes that are not supported by the printing device; and

5 the step of generating preview document data at the printing device includes

6   the step of translating one or more of the one or more print driver

7   attributes into one or more printing device attributes that are

8   supported by the printing device.

1 14. The method as recited in Claim 1, wherein the step of generating preview

2 document data at the printing device further includes the steps of:

3 determining the resolution of a display device that is associated with the

4   client; and

5 generating the preview document data based on the resolution of the display

6   device.

1 15. The method as recited in Claim 1, wherein

2 the step of generating preview document data at the printing device

3   includes the steps of generating two-dimensional (2-D) preview document

4   data; and

5   the step of displaying the preview version of the electronic document

6   includes the step of displaying portions of the electronic document at

7   the client in 2-D.

1   16.   The method as recited in Claim 1, wherein

2   the step of generating preview document data at the printing device

3   includes the steps of generating three-dimensional (3-D) preview document

4   data; and

5   the step of displaying the preview version of the electronic document

6   includes the step of displaying portions of the electronic document at

7   the client in 3-D.

1   17.   The method as recited in Claim 1, wherein

2   the step of generating preview document data at the printing device includes

3   the steps of generating HyperText Markup Language (HTML) data at

4   the printing device; and

5   the step of transmitting the preview document data to the client includes the

6   step of transmitting the HTML data to the client from the printing

7   device.

1   18.   The method as recited in Claim 1, wherein

2   the step of generating preview document data at the printing device includes

3   the steps of generating Extensible Markup Language (XML) data at

4   the printing device; and

5   the step of transmitting the preview document data to the client includes the

6   step of transmitting the XML data to the client from the printing

7   device.

1   19.   A method for previewing an electronic document, the method comprising:

2   receiving from a client at a printing device document information associated

3   with an electronic document;

4   generating preview document data at the printing device based on the

5   document information and a set of one or more specific

6   characteristics associated with the printing device; and

7   transmitting to the client the preview document data for causing a display

8   unit associated with the client to display a preview version of the

9   electronic document.

1   20.   The method as recited in Claim 19, wherein:

2   the document information is Page Description Language (PDL) data; and

3   the step of receiving document information includes receiving PDL data at

4   the printing device.

1   21.   The method as recited in claim 19, wherein the step of generating preview

2   document data at the printing device includes generating raster image data at

3   the printing device based upon the document information and the set of one

4   or more specific characteristics associated with the printing device.

1   22.   The method as recited in Claim 19, wherein

2   the printing device is associated with one or more different paper

3   characteristics that are available for printing electronic documents;

4   and

5   the set of one or more specific characteristics associated with the printing

6   device includes one or more of the one or more different paper

7   characteristics that are available for printing electronic documents.

1   23.   The method as recited in Claim 19, wherein

2   the printing device is associated with one or more different finishing

3   characteristics that are available for selection; and

4   the set of one or more specific characteristics associated with the printing

5   device includes one or more of the one or more different finishing

6   characteristics that are available for selection.

1   24.   The method as recited in Claim 19, wherein the step of generating preview

2   document data at the printing device further includes the steps of:

3   determining a display resolution of the display device that is associated with

4   the client; and

5   generating the preview document data based on the display resolution of the

6   display device.

1   25.   The method as recited in Claim 19, wherein

2   the step of generating preview document data at the printing device

3   includes generating three-dimensional (3-D) preview document data; and

4   the step of transmitting to the client the preview document data includes

5   transmitting preview document data that causes the preview version

6   of the electronic document to be displayed in 3-D on the display unit

7   associated with the client.

1   26.   A computer-readable medium carrying one or more sequences of instructions

2   for previewing an electronic document, wherein execution of the one or more

3   sequences of instructions by one or more processors causes the one or more

4   processors to perform:

5   generating the electronic document at a client;

6   transmitting document information associated with the electronic document

7   from the client to a printing device;

8   generating preview document data at the printing device based on the

9   document information and a set of one or more specific

10   characteristics associated with the printing device, wherein the set of

11   one or more specific characteristics are unavailable at the client;

12   transmitting the preview document data to the client from the printing

13   device; and

14   displaying a preview version of the electronic document at the client based

15   on the preview document data that is received from the printing

16   device.

1   27.   A system for previewing an electronic document, comprising:

2   one or more processors;

3   one or more memories coupled to the one or more processors; and

4   one or more sequences of instructions stored in the one or more memories,

5   wherein execution of the one or more sequences of instructions by

6   one or more processors causes the one or more processors to perform

7   the steps of:

8   receiving from a client at a printing device document information

9   associated with said electronic document;

10   generating preview document data at the printing device based on the

11   document information and a set of one or more specific

12   characteristics associated with the printing device, wherein the

13   set of one or more specific characteristics are unavailable at

14   the client;

15   transmitting the preview document data to the client from the printing

16   device for displaying a preview version of the electronic

17   document at said client.

1   28.   An document preview apparatus comprising:

2	a memory for storing characteristics that are associated with the document
3	preview apparatus, wherein the characteristics are unavailable to
4	clients that are connected to the document preview apparatus; and
5	one or more processors that are configured for
6	receiving from the client document information associated with an
7	electronic document;
8	generating preview document data based on the document
9	information and one or more of the characteristics associated
10	with the document preview apparatus; and
11	transmitting to the client the preview document data for causing a
12	display unit associated with the client to display a preview
13	version of the electronic document.

49986-0500 (RSID 1-316)